DEPARTMENT OF ENVIRONMENTAL PROTECTION

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# MEMORANDUM

January 10, 2008

TO: Phil Alperson
Montgomery County BRAC Coordinator

FROM: Stan Edwards
Chief, Division of Environmental Policy & Compliance

SUBJECT: Comments on *Draft Environmental Impact Statement for Activities to Implement 2005 Base Realignment and Closure Actions at National Naval Medical Center*

Provided below are comments prepared by the Department of Environmental Protection (DEP) on the *Draft Environmental Impact Statement (EIS) for Activities to Implement 2005 Base Realignment and Closure Actions at National Naval Medical Center (NNMC)* dated December 2007. As requested, these comments are presented in the same order as Section 4 of the Draft EIS.

Water Resources (Section 4.2)

- The Draft EIS should acknowledge that this site drains to a water body identified as impaired by the Maryland Department of the Environment (MDE) and which will require a regulatory limit (Total Maximum Daily Load, or TMDL) on discharges of the impairing substances. Development of the site will require runoff control measures that do not contribute to the identified impairments. These include bacteria, nutrients, sediment, and aquatic biota. The NNMC is covered under an MDE general permit for stormwater discharges, and DEP understands that MDE will be providing a "'waste load allocation" for each permittee (or perhaps by category of permittee – for example, all federal or all state facilities) within an impaired watershed through the TMDL process.

- The Draft EIS should also acknowledge the Energy Independence and Security Act of 2007, which includes the following provision related to stormwater controls for federal development projects.
    - Section 438. Storm Water Runoff Requirements for Federal Development Projects – The sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to

> maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.

Note the commitment in the Act to the "maximum extent technically feasible" rather than the existing language in the Draft EIS, which refers to using low impact development measures "when practical."

- In the Water Resources section of Table 2-4, it is noted that the increased impervious surface due to development on the site would "increase stormwater runoff and pollutants." The volume of water needing treatment to meet the MDE Design Manual requirements given the amount of new imperviousness that will be created should be analyzed to determine if additional area may be needed to meet stormwater management requirements.

- Only five of the six ponds used for stormwater management are labeled in Figure 3-3. In addition, Figure 3-3 should include the delineation of the drainage areas going to those ponds and number of acres and amount of impervious area served by each pond. This would provide a baseline for the existing level of stormwater control on the site.

- In Section 3.2.1, Water Quality, the document notes that "the District of Columbia has also established a fecal bacteria TMDL for the portion of the Rock Creek within D.C.'s boundaries." On July 30, 2007, the EPA approved the bacteria TMDL for the Maryland portion of Rock Creek. The document should acknowledge the DEP monitoring work which has shown the subwatershed of this part of Rock Creek to be in poor stream resource condition with fair habitat conditions (Countywide Stream Protection Strategy, 1996 and 2003 update).

- In Section 3.2.1, there should be a diagram of the site which documents which additional areas are available for installation of the types of structural controls from the MDE Design Manual listed on page ES-17. The document should note that DEP and the National Institutes of Health (NIH) are cooperatively adding stormwater management and improving water quality to a southern, more upstream part of this same campus (near the National Library of Medicine). This is a stormwater pond to serve 220 acres at a cost of $2 million. Whatever is done downstream should not "offset" the improvements anticipated from this new upstream control.

Air Quality (Section 4.4)

- The Draft EIS, including Appendix B, contains an in-depth analysis of emissions of criteria air pollutants produced during construction of the project and during the operation of new heating equipment, generators, and parking garages. It also contains a detailed analysis of the potential for localized increases in carbon monoxide from additional traffic and parking garages. No similar localized analysis is shown for NOx and PM,

perhaps due to the fact the effects of these criteria pollutants is a more regional rather than local issue. A brief explanation of the reason for not undertaking such an analysis should be included.

- It would be beneficial for air quality during construction to require the use of control measures such as diesel oxidation catalysts or particulate filters on diesel equipment and the use of ultra-low sulfur diesel (ULSD) in off-road construction equipment. (On-road diesel vehicles already use ULSD.) Such measures have been implemented on other major construction projects, including the Inter-County Connector.

- Table 3-3 is incorrect. There is no separate standard for 24 hour average $PM_{2.5}$ in Maryland. The NAAQS for 24 hour average $PM_{2.5}$ is the Federal standard of 35 $ug/m^3$.

- Table 4-3 references the controlled regional emissions inventory contained in the State Implementation Plan (SIP) for the region prepared by the Metropolitan Washington Air Quality Committee. The table includes the 8-Hour Rate-of-Progress figures for 2008. It would be more appropriate to show the figures for 2009, which are also contained in the SIP. It is unclear why the table does not include emissions from area sources. In addition, the units used in Table 4-3 are incorrect. Emissions in the SIP are tons per day (TPD), not tons per year (TPY).

- Appendix B (page B-4) states that "Under the current EPA policy for addressing $PM_{2.5}$ precursors, only $PM_{2.5}$ and $SO_2$ must be evaluated in all regions. States are not required to evaluate VOC, NOx, or ammonia unless the State or EPA make a technical demonstration that those particular emissions from sources within the state significantly contribute to $PM_{2.5}$ concentrations in a given non attainment area." While this is true for VOC and ammonia, it is not true for NOx. Rather States are required to address NOx as a $PM_{2.5}$ attainment plan precursor and evaluate reasonable controls for NOx in $PM_{2.5}$ attainment plans, unless the State and EPA make a finding that NOx emissions from sources in the State do not significantly contribute to $PM_{2.5}$ concentrations in the relevant non attainment area.

- Proposed dust control methods listed in the EIS seem to adequately address the issue of fugitive dust during construction and demolition. The EIS proposes the following precautions:
    - Use, where possible, of water or chemical for dust control.
    - Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials.
    - Covering of open equipment for conveying materials.
    - Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.
    - Employment of a vehicle wash rack to wet loads and wash tires prior to leaving the site

- Application of these and other more extensive control measures will be required during the demolition of buildings containing asbestos, lead paint and mold. The Draft EIS recognizes the potential for these substances to be present in older buildings, and notes that it is standard practice to check for asbestos, lead based paint and mold prior to demolition or renovation in any building. In addition, it states that NNMC has procedures in place to manage the substances, to identify problem areas, protect and inform affected persons, remediate as necessary, and comply with the applicable standards. Demolition or renovation of older buildings with asbestos and lead paint is not an uncommon occurrence in the region, and there are a number of general and specialized contractors capable of effectively and safely performing such work.

Noise (Chapter 4.5)

- Table 3-6 of the Draft EIS is incorrect. The levels shown in Table 3-6 are identified as the maximum Leq (equivalent sound pressure level) for the State and County during daytime and nighttime at commercial and residential properties. The State and County levels established for noise at the receiving property lines for commercial and residential properties are maximum allowable noise levels, measured as dBA, not Leq as stated in Table 3-6. Leq is the total amount of sound energy expended during a specific period of time, stated as a single dBA level. Therefore, when the sound level is expressed as Leq it is possible for the fluctuating sound level to exceed the maximum allowable noise levels as specified in State law and the Montgomery County Noise Control Ordinance, Chapter 31B of the Montgomery County Code.

- The EIS makes no mention of noise control measures to be implemented post construction. Of particular concern is tonal noise, which can become problematic and is often associated with mechanical HVAC equipment and cooling tower units. Tones are often perceived as a whine or hum, which can be heard distinctly as a single pitch or a set of pitches. The Montgomery County Noise Control Ordinance contains noise limitations for pure tones, which are defined as a prominent discrete tone. A prominent discrete tone exists if the one-third octave band sound pressure level in the band with the tone exceeds the arithmetic average of the sound pressure levels of the 2 contiguous one-third octave bands by greater than 5 dBA for center frequencies of 500 hertz and above, 8 dBA for center frequencies of 160 to 400 hertz, and 15 dBA for center frequencies less than or equal to 125 hertz. For prominent discrete tones, the noise limitations are 5 dBA lower than defined in the Montgomery County Noise Control Ordinance, Chapter 31B-5(a)(1) of the Montgomery County Code.

- On page 4-26, the Draft EIS notes that "Construction and demolition contractors would be expected to adhere to State of Maryland and Montgomery County requirements. Essentially, noise levels of 75 dBA to 85 dBA are permissible during the construction weekday and these are reduced to 55 dBA to 67 dBA at other times, depending upon the

surrounding land use." As correctly stated on page 3-27, the maximum allowable noise level at the receiving property line is 85 dBA only if the Montgomery County DEP has approved a noise-suppression plan for the activity.

- The proactive noise control measures mentioned in the EIS, if properly and comprehensively applied, should adequately limit the impact of construction noise. The proposed potential measures to control noise impacts include:
    - Source limits and performance standards to meet noise level thresholds for daytime, evening, and nighttime hours
    - Designated truck routes
    - Establishment of noise monitoring stations for measuring noise prior to and during construction
    - Design considerations and project layout approaches including measures such as construction of temporary noise barriers, placing construction equipment farther from noise-sensitive receptors, and constructing walled enclosures/sheds around especially noisy activities such as pavement breaking
    - Sequencing operations to combine especially noisy operations to occur in the same time period
    - Alternative construction methods, using special low noise emission level equipment, and selecting and specifying quieter demolition or deconstruction methods

- The Draft EIS does not address the specific location of new heating, ventilating, and air conditioning (HVAC) equipment and emergency generators on the site. Careful consideration should be given to the location of this equipment. Although all equipment will ultimately have to comply with applicable County nose standards, careful planning will minimize the need for expensive and technically difficult retrofit measures after operations begin.

Transportation (Chapter 4.7)

DEP is aware of several local storm drainage issues that might need to be evaluated within the scope of road improvements associated with the NNMC expansion:

- Jones Bridge Road and Glenbrook Parkway: DEP understands that the culvert under Jones Bridge Road and storm drain under Glenbrook Parkway were sized for the 10-year storm. When this capacity is exceeded in higher storm events, tail water from overtopping Jones Bridge Road may back up to ground level near several houses upstream of this intersection. Consequently, a local floodplain analysis should be part of any road improvements that might increase flows to the Jones Bridge Road culvert or alter the grade of Jones Bridge Road at this intersection.

- Woodmont Avenue and Wisconsin Avenue: The storm drains both upstream and downstream of the Wisconsin Avenue culvert were designed to convey the 10-year storm by the Washington Suburban Sanitary Commission (downstream of MD 355 in the early 1960's) and then Montgomery County (upstream of MD 355 in the mid 1980's). Larger storm events result in the flooding of Wisconsin Avenue near Woodmont Avenue. If the NNMC project planners are concerned about road access during severe (e.g., 100-year) storm events, they might need to assess this culvert and the associated storm drain systems to verify the adequacy of existing conditions.

Please contact me if you have any questions regarding these comments. I can be reached at 240-777-7748 or stan.edwards@montgomerycountymd.gov.

cc: Robert G. Hoyt, Director, DEP